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Rose-Hulman Scholar

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Volume 27 - Issue 6 - Friday, October 4, 1991

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**Welcome
Back
ALUMNI!**

the Rose Thorn

**Football
GO ROSE!
Beat DePauw!**

News Briefs

Naster, ACME Vocals to present Homecoming concert

There will be plenty of entertainment in Shook Fieldhouse Saturday Night following the football game. The annual SAB Homecoming concert traditionally closes out Rose-Hulman's homecoming weekend.

Kicking things off at 8:00 will be David Naster followed by ACME Vocals who will take the stage around 9:15.

ACME Vocals is a five member a capella singing group who perform all types of music from jazz to pop-rock. Based in Chicago, ACME Vocals has drawn praise from all over the country, including the praise of MTV, who called the group

"SENSATIONAL!"

Before ACME Vocals performance, comedian David Naster will share his wit with the crowd. The comedian has performed on many college campuses, and in 1990 was named the Comedy Artist of the Year by the National Association of College Activities.

Tickets will remain on sale until the performance Saturday, as well as at the pep rally tonight. Tickets are \$6 for cabaret seating and \$5 for general admission seats.

Don't wonder what everyone is talking about Sunday, go to the show Saturday and find out for yourself.

Students offered opportunity to 'Lake-a-prof'

Alpha Phi Omega (APO), the only national coeducational service fraternity, is sponsoring Lake-A-Prof as a fund-raiser for the Big Brother/Big Sister program.

On Wednesday, Thursday, and Friday, a booth will be set up in the commons and by the cafeteria during lunch. A bucket will be designated for each candidate. Alpha Phi Omega will also have the profs' buckets by the Homecoming Mums' pickup.

By the end of the half-time of the football game on Saturday, the professor with the most money in his bucket will be tossed into the lake of his choice.

Participating professors include:

- 1) Dr. Houghtalen - Civil Engineering

- 2) Dr. Cornwell - Mechanical Engineering
- 3) Dr. Bremmer - Economics
- 4) Dr. Mech - Mechanical Engineering
- 5) Dr. Lebaric - Electrical/Computer Engineering

Who will be doing the laking? Those who are the top four donors will take the profs. When donating, tell the APO member who is working that you want to be added to the list for doing the laking. Be sure to tell the APOer how much you donate, as there is no other way to keep track of donations.

The results from Lake-A-Prof will be announced during half-time of the game, and after the game the "winner" will go swimming.

Rose-Hulman students present talks at Mathematics Conference

Rose-Hulman students presented talks at mathematics conference

Four Rose-Hulman students presented talks on mathematics at Miami University last Friday and Saturday, September 27-28. The participants were Jon Atkins, John O'Bryan, Kevin O'Bryan, and Omar Zaidi.

Atkins' talk was entitled *Characterizing Finite Groups that are the Union of Few Proper Subgroups*. O'Bryan's

talk was entitled *Parallelization of a Parameter Identification Problem*, while Zaidi's talk was entitled *Laplace's Equation in Non-Conventional Coordinate Systems*.

O'Bryan gave two talks; the first was entitled *Cycles, Cycliziers, and Tidy Groups*. The second arose from his studies abroad during his junior year, which he spent in Budapest, Hungary. It was entitled *All about the Budapest Semesters in Mathematics Program*.

Indiana Senate Democrats offer legislative internships

State Senate Democrat Leader Dennis P. Meary, D-Michigan City, has announced that the Indiana Senate Democrat Caucus is now accepting applications for 12 legislative internships with the 1992 Indiana General Assembly. Legislators begin session in early January and continue through March 15, 1992.

The paid internship is available to college juniors, seniors, graduate students, and recent graduates. No specific major area of study is required. Course credit is determined by each school.

Selected students are considered full-time staff throughout each session. Each intern works for two senators with the exception of one journalism major who is assigned to work with the media relations staff.

Intern duties include: legislative research, attending committee hearings, responding to constituent inquiries, writing press releases, and assisting senators with daily legislative activities.

Applicants will be interviewed October 7-23 at the State House in Indianapolis and selected by November 4.



Rose-Hulman students Dylan Schickel (right) and Andrej Petryna help a local high school student with his homework. They are participants in the homework hot-line, a project developed by the Vigo County School Corporation in conjunction with Rose-Hulman, Indiana State University and Saint Mary-of-the-Woods College. The Rose-Hulman effort, set up as an experiment, has proven very successful. The Rose-Hulman staffers are members of the Herman A. Moench student chapter of the National Society of Professional Engineers.

photo by: Brian Dougherty, Thorn staff

WMHD increases power over 400%

Special to the Thorn

Since December 1989 WMHD has been awaiting approval of a power increase application. However, the Federal Communications Commission (FCC) has granted WMHD-FM permission to construct a new transmitting facility.

This new facility will be accompanied by a power increase of over 400%, and an increase in antenna height from 80 to 325 feet above the ground. This project is expected to provide a 1.0 mV/m radio contour across Terre Haute. The increase will provide a gain of 312 square miles to the WMHD coverage area, a 577% increase.

This new facility is to be located on an existing tower in West Terre Haute. Tower space will be leased from the owners on a per-month basis.

Many new technical challenges must be met, according to Michael Brown, Director of Operations and Engineering: "Moving the transmitter to a location off campus gives WMHD many advantages, yet it will also require quite a bit of new equipment."

In order to get the audio signal out to the tower site, a radio link in the 950 MHz range will be built atop BSB hall, current home of the WMHD tower. Control of the transmitter will be handled through a subcarrier on the 950 MHz studio-to-transmitter link (STL). Telemetry readings from the site will "ride" back on a subcarrier at 67 KHz on the WMHD 90.5 MHz signal.

"This system of using our subcarriers for telemetry and control eliminates the need of a TSL (transmitter-to-studio link) or of

phone lines," said Brown. Phone lines for broadcast audio and data can cost around \$250 per month.

The cost of this project is a major concern to WMHD. This concern has already been addressed since the project started in 1989. SGA has already contributed \$5,000 to cover the initial engineering surveys and reports that WMHD prepared for submittal to the FCC. The main cost is the new equipment, estimated at \$50,000 total.

WMHD is investigating the possibility of purchasing used equipment; however, the cost to complete the project will still be in the tens of thousands of dollars range.

"We are working hard with the administration, Tom Mason in particular, to solve the money problem," stated Brown. WMHD has until December 5, 1991 to build the new transmission facility.

Summerlot among four alumni award winners

A local engineer and a Terre Haute native are among four men who will receive the 1991 Rose-Hulman Institute of Technology Honor Alumnus Award during the college's Homecoming activities Oct. 5.

They are being honored for their contributions to the engineering profession and service to Rose-Hulman. The award is the highest honor bestowed by the Rose-Hulman Alumni Association.

Recipients include Raymond Summerlot of Terre Haute, who retired this year after a 41-year engineering career with Winslow Scale Co., Patterson Equipment Co., and Summerlot Engineered Products Co.; and Terre Haute native Jack Foltz, vice president and general counsel for Sun Refining and Marketing Co., Philadelphia, Pa.

Summerlot earned a mechanical engineering degree in 1950 and served for 20 years as chief engineer for Winslow Scale. During that time, he redesigned the entire standard line of company products to provide for greater reliability. After leaving Winslow Scale, his design work continued for two local firms where he cre-

ated new drag conveyors and conveyor systems.

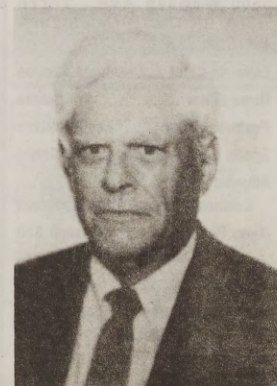
Summerlot has been a class agent for the RoseTech Alumni Association for 12 years, a class reunion co-chairman for three years, and he served as a key volunteer during two major Rose-Hulman fundraising campaigns.

Foltz, a graduate of Honey Creek High School, has been a lawyer in the corporate law departments of two major petroleum companies for about 30 years. Prior to joining Sun Refining in 1980, he worked for 19 years in the legal department of Shell Oil Co. His duties have included managing corporate attorneys in all areas of corporate, financial, and securities legal matters.

Foltz has been a RoseTech Alumni Association club officer for eight years and was an area chairman for one of the college's major fundraising campaigns.

Also being honored are Dennis Fritz, business unit manager for mid-America, MacDermid Inc., Naperville, Ill.; and Arthur Nelson, global financial adviser, E.I. DuPont Inc., Wilmington, Del.

Fritz is responsible for the sales and service of MacDermid's printed circuit products in the



Raymond Summerlot

central United States. The company is a \$150 million a year producer of specialty chemicals for the printed circuit and metal finishing industries.

Fritz graduated in 1968 from Rose-Hulman and has been an alumni association class agent for 23 years and a RoseTech club officer for three years.

Nelson has been in numerous engineering management posts with E.I. DuPont since graduation. (Continued on Pg. 6)

**SEE HOMECOMING QUEEN
CANDIDATES ON
PAGE 7**

Features

Clarence Thomas

The Senate committee that was charged with interrogating Clarence Thomas has reached a conclusion, or, in the way of Congress, inconclusion. Their vote on the recommendation of Thomas was a tie. The vote on Thomas' appointment will go to the Senate floor without a recommendation from the committee.

Like the adjacent comic implies, the decision by Bush to appoint Mr. Thomas was based on more factors than just his court record. But is that reason to reject him?

One cannot choose a Supreme Court Judge on the basis of one legal opinion. The job is much larger than that. The Democrats are fighting for his rejection because his philosophy differs. Are they going to fight until someone that better fits their mold is appointed by Bush? And when will that happen?

TOM the
DANCING
BUG

PRESENTS

FIRST YOU NEED TO DEFINE YOUR QUALIFICATIONS.

FOR EXAMPLE, LET'S SAY YOU NEED A HISPANIC, FEMALE, HANDICAPPED, SOMEWHAT RELIGIOUS VERY CONSERVATIVE 51-YEAR-OLD STRICT CONSTRUCTIONIST WHO HAS NEVER SMOKED MARIJUANA.

HOW TO CHOOSE A
SUPREME COURT JUSTICE1991
RUBEN
BOLLING

ONLY EIGHT SUCH PEOPLE EXIST.



UNFORTUNATELY, NONE OF THEM HAVE LAW DEGREES.

BUT WE'RE IN LUCK! ONE WORKED BRIEFLY AS A FILE CLERK IN THE TULSA, OKLA. BUREAU OF TRAFFIC ADJUDICATIONS!

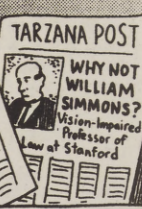


RIOS, JULIA

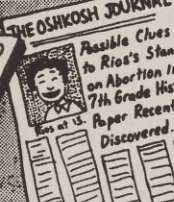
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HAVE THE BIG GUY ISSUE A FIRM STATEMENT.

THE FACT THAT MS. RIOS IS A HISPANIC, FEMALE, HANDICAPPED, SOMEWHAT RELIGIOUS VERY CONSERVATIVE 51-YEAR-OLD STRICT CONSTRUCTIONIST WHO HAS NEVER SMOKED MARIJUANA HAD NOTHING TO DO WITH MY DECISION TO NOMINATE HER.



PREPARE YOUR NOMINEE TO BE RESPECTFULLY EVASIVE AT THE CONFIRMATION HEARINGS.

IT WOULD BE IMPRUDENT TO COMMENT ON HYPOTHETICAL CASES...



AND WE'VE GOT ANOTHER MEMBER OF THE NATION'S HIGHEST COURT!

RIGHTS, SHMIGHTS! THIS GUY'S A WHINING CRYBABY PURE AND SIMPLE!



Are we losing our defense?

by D.B. Dennis

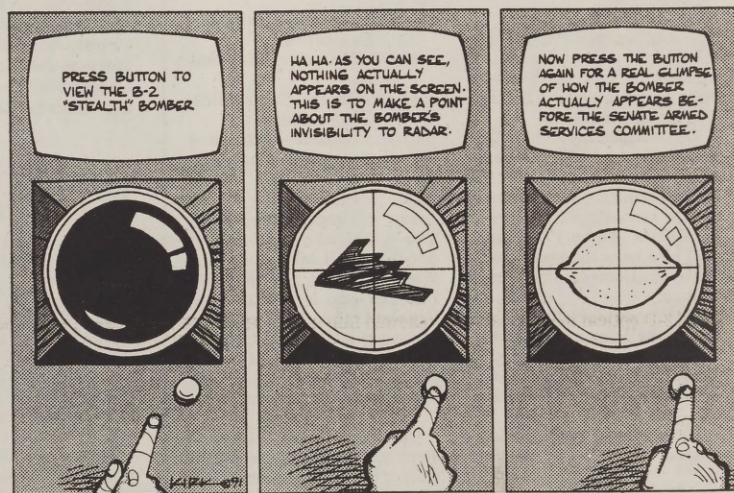
The recent proposal by President Bush to cut large amounts of nuclear weapons has been criticized by some as a political move for the upcoming election. This strikes me as an odd charge, since the president is constantly under surveillance by the media and any action he takes, no matter how small, is seized upon as a political act. One should look at what he is doing first, and worry about how the act will affect him politically later. In this arms proposal, all tactical nuclear weapons will be removed from Europe and either destroyed or put in storage. All nuclear-equipped Tomahawk missiles and aircraft-delivered nuclear weapons will be removed. All strategic bombers will be taken off of alert. The plans for the Peacekeeper (MX) missiles to be deployed by rail are scrapped and all MIRV-equipped land based missiles are to be removed.

Now, all of this seems like a lot, but let me explain a bit on what these systems are. First of all, tactical nuclear weapons are small, low-yield bombs primarily intended for use against troops and tanks on the battlefield. This was a cornerstone of our defense

of Europe, using them to counteract the superiority in numbers of the Soviet forces. These weapons include enhanced radiation weapons, the somewhat misnamed "neutron bomb". This bomb releases a higher-than-normal gamma radiation level with a lower-than-average residual radiation level (fallout). All tactical nukes are designed to be delivered by artillery shells or aircraft. These have been tested extensively with success. They are like robot planes with computer maps that follow terrain features to their targets. Sea-based nukes are your classic gravity bomb meant to be dropped by an aircraft.

Until fairly recently, about thirty percent of the U.S. bomber force was kept flying around the clock in case of a surprise attack. When our early warning capability was improved, the bombers were taken out of the air and on a five minute alert, fully fueled and armed. This practice has now been rescinded as of 27 Sept. and the planes have been unloaded.

MIRVs, or multiple independently targeted reentry vehicles, is the acronym of a missile which can carry up to ten warheads, each going to a different target. These missiles include the Minuteman version 3 and the Peacekeeper. When you take a look at the total of the proposal, you will notice that all of these systems were designed to counter



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a Soviet weapon system. The possibility of war with the Soviet Union has not disappeared completely, but I think that most will agree it is a lot less likely.

That is why removing these weapon systems does not reduce our defensive posture in the least. It is as if a soldier is assigned to fight in the jungle, he doesn't want

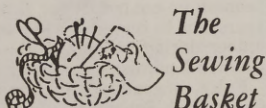
to carry around his desert equipment with him, but put it away in case he is called to the desert. It just makes the military that much more efficient.

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The Rose Thorn welcomes letters or comments from readers. Articles, ideas, and announcements are also desired. In view of length constraints, we reserve the right to limit the lengths of comments and use excerpts from letters. All submitted material must be signed. All material should be submitted the Monday prior to publication.

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Smile O' the Day



Stevi is smiling because she doesn't have to take
(Your favorite Rose class)

LETTERS POLICY:

The Rose Thorn welcomes letters to the editor. All letters must be signed to be printed. Letters should be dropped off at the Thorn office or mailed to campus box 170 by the Monday prior to publication.

Disclaimer: The opinions expressed in letters and articles in the Thorn do not necessarily reflect those of the majority of the staff, the editors, or the students of Rose-Hulman.

Opinion

Getting paid dog to work with Bozos

The supervisor called me, the tech, into his office to assign me my next mission.

"There's a computer gone down in the CEO's office," he said. "He's not too happy about it, either. It's come down the line that he wants it fixed NOW. Get up there and do your stuff."

Wow. I had never met the CEO before. He was the Big Man, the aloof boss, the Supreme Engineer. In his early days he had invented LS EPWMU, the Ludicrously Speedy Erasable Programmable ReadWrite Microprocessor Unit, that had sent the small engineering firm rocketing into the upper echelons of the Forbes 500. Impressive.

I took my tools into the depths of the plush management section, working my way through the hierarchy of secretaries until I reached the top of the pyramid. And then I stood in his presence.

He looked up as I stepped into the windowed room overlooking the city. He addressed me.

"This thing's shot," he motioned toward the computer. "I can't do a thing with it. Heck, I can't even get it open." He was nursing a wound and I saw the letter opener lying on the desk. Horrified, I realized he had tried to remove the Phillips screws from the case with it.

"What seems to be the problem?" I asked professionally.

"The thing won't turn on. I had to move it across the desk so I yanked on the cord and now the thing won't work."

I examined the unit. It was sweet in the eyes of any connoisseur. It had the cutting-edge 686 low-power emitter coupled logic microprocessor with a Cray math coprocessor. It had the high-speed 3-D optical memory array. It had the Holographic VGA. It had a wire from the 120-volt power line sticking out the back, almost as if it had been, in technical terms, yanked.

I Don't Even Want To Think About It!

by Kevin Neilson

"Well," I reported, "You just have to solder the power wire back on here. You want me to do it?" I didn't want to insult his abilities.

"Heck, yes," he replied. "I don't know how to operate one of those things." He waved toward my soldering gun. "I don't think I ever did."

I was shocked beyond belief. My hero, the Supreme Engineer, didn't even know how to solder.

He didn't even have a Phillips screwdriver. I quietly repaired the computer, wanting to leave that horrid place.

I finished, but before I left I had to help that man again.

"I can't get nothing but this DOS prompt on the computer. How do I get it into Windows?"

I had to execute the simple command for him.

There was more. He decided he'd put me to use while I was in there. I put a new battery in his dust-covered HP and showed him how to use Reverse Polish Notation. I put his printer on-line. I told him the color code for a 1K Ohm resistor which he needed for an order form. I told him the voltage drop across a p-n junction and showed him how to tell which pin on an IC was .1.

Exasperated, I exclaimed, "You are the most useless, worthless, overpaid, undersynapsed man I have ever met. Who are you

really?"

And then I caught the glint of the gold nameplate on his desk. I stared in horror as his voice echoed in my ears.

"Don't you see? I'm you in 20 years!"

His evil laugh stopped abruptly as I awoke in a cold sweat.

I vowed never to go into management.

Here we are constantly urged on by the statistics: such-and-such percentage of Rose grads go into management within 5 years of graduation so-and-so many Rose graduates become CEO's of major corporations. In the cafeteria students speak of recent grads who are already getting paid big to do nothing. As one student put it: "Would you rather be getting paid dog, probably working with the bozos, or be getting paid big time for management?"

Another comment: "They stick you into management and your whole degree has been for nothing. But you're not caring a whole lot when you're getting the 50% pay raise."

Actual engineering is considered by many merely a stepping stone to something better. A drudgery. But it's what I came here for, and it's what I want to do.

I'm kind of scared of getting a degree. I have this theory that the more education one has, the more useless one becomes. I've seen too many examples of people who can design complex circuits on paper but probably couldn't wire up a flashlight.

I guess most real designers just draw up everything on paper and throw it to the techs. This is how things are done in the industry. I understand this. Each person has his own area of expertise, and each person does the work he is trained for better than anyone else.

Specialization is necessary, but it's often overdone. Often an engineer draws up something

simple and wants it tested or built and it would be easier for him to wire it up himself instead of throwing it to the technician. Instead, the project gets mired in a confusing web of hierarchy and bureaucracy, getting delayed and incurring enormous expenses as it gets shifted from one level to another.

Most of these people feel that they are above doing such dirty work, that holding a pair of pliers is unrespectable, that they paid their dues in schooling so they wouldn't have to do such things.

Of course this description can be generalized to fit people in many occupations. The work force becomes more and more unproductive as workers are increasingly unwilling to do what they consider petty. The worker gets promoted to supervisor and becomes useless. On a smaller scale, the detasseler gets promoted to crew leader and becomes useless.

I can identify with a particularly apt example. Last summer I worked as a lifeguard (Hey — it's respectable! Someone's got to babysit those kids.) The pool where I worked employed a staff of four guards and a manager. We guards were often annoyed with the manager. She got paid a salary which remained constant no matter how much work she did.

She did very little duty, i.e., sitting in the chair, but rather she spent what time she was there absorbing ultraviolet. He who complained most loudly about her (amongst ourselves) was a lifeguard by the name of John.

I worked at the pool again this summer (Hey — it's respectable!) and found that John had been promoted to the position of manager. In a pre-season staff meeting, he assured us that he would be a better manager and would do real work (i.e., clean, sit in the chair).

John by far exceeded the non-

productivity of the previous manager. He soon informed us that chair duty was not for managers. We also inferred that cleaning the toilets was not either. He was suddenly a deity whose only duties were to get sun and leave the work to me, the assistant manager. The only words I ever heard him utter were, "Well, Kevin, I'm takin' off. Have fun."

The pool was not such a large operation that we could afford to have one person acting as only a supervisor. But our boss wasn't even that. When he left I would always think, I would think to myself, "If I was the manager, getting paid a salary, I would still clean the toilets, pull scum from the filters, and do chair duty as much as anyone else." After thinking that I would say to the next guard in the hierarchy, "Well, Steph, I'm takin' off."

John knew what he was doing. Nothing. And getting paid a lot more for it.

His position was not useless. He was. He had lost the desire to work and had gained an arrogance which made him abhor it.

This situation doesn't exist only at swimming pools. There are so many situations in which it takes fifteen people to supervise one laborer who takes a break every five minutes anyway.

I'm not saying management is a useless position — it isn't. It is the attitude of some of those that work in it that makes it useless. It's OK for an engineer to be in management — but he shouldn't forget what he has learned and should not be afraid to get his hands dirty. Promotion should be accepted as not a lessening of work, but as an increase. Finally, one's education should not be wholly forsaken. The manager should be one who has all of the skills of his position in addition to the skills of those below him.

Sorry, but it's late. I've got to get this article down to the layout man. Editors don't do layout.

The price of ultimate disobedience

This (Monday) morning has been interesting. When I went to work, Kathy, my boss, was telling us about a case of child abuse written up in the newspaper. She was asking how any parent could abuse their child. Then I read about the potential fight within the First Church of Christ, Scientist, in The New York Times. These incidents, working together, made me upset.

These two incidents may seem unrelated, and they are by worldly standards. But they both have a common thread. My response to Kathy was simple; the parents have chosen to ignore God. A similar thing can be said about the Christian Science denomination; they appear to have lost sight of Christ.

The American society is in disarray. We have ethnic unrest; we have child abuse, we have rampant crime, we have corrupt politicians. The list can go on and on. The question remains: Why? The immediate answer is simple: "For where you have envy and selfish ambition, there you find disorder and every evil practice." James 3:16(NIV) What is the connection between selfish ambition and every evil practice?

The connection is disobedience. Disobedience to God's com-

The Fish-Eye Lens

by Gregory Ford

mands. When Eve ate the fruit from the tree of knowledge of good and evil, she did it because she wanted to be like God. And through that single act of disobedience, Adam and Eve brought sin into the world, the sin that brought with it every evil practice.

Paul the Apostle echoes this. He says we have two options, to offer ourselves as "slaves to sin," or "as slaves to obedience, which leads to righteousness." -Romans 6:16(NIV)

In Romans 1:18-32, Paul lists all the things that plague society through disobedience to and chosen ignorance of God. What is so chilling is that this passage reminds me so much of American society today.

This should not be surprising, considering that we are taught to look out for ourselves. Society

says that we should try our best to get as far along in society as possible and climb the corporate ladder as far as possible. This is selfish ambition, plain and simple.

It is also possible to find rampant hedonism and materialism in America. Television is full of ads using sex to sell products, an appeal to hedonism. Also, Americans are trying to keep up with the Joneses. The American dream is a house, two cars, a boat, and so on. We, as a society are caught up trying to buy things. Both materialism and hedonism scream with envy and selfish ambition.

With some, this may be a fine situation. It grieves me to see the results. But what are we to do about it?

The answer is simple, but unpopular. We can either offer ourselves up as slaves to sin, or as slaves to obedience. One is the cause of the problem; the other is the solution. As the popular adage goes, will you be part of the solution, or will you remain part of the problem?

Furthermore, since they did not think it worthwhile to retain the knowledge of God, He gave them over to a depraved mind, to do what ought not to be done. They have been filled with every kind of

wickedness, evil, greed and depravity. -Romans 1:28-29a(NIV)

Baptist Student Fellowship

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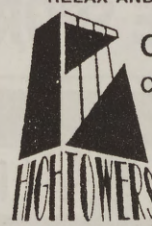
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LATE BREAKING NEWS

Rose-Hulman Board of Managers voted Thursday, Oct. 3, to change the long standing all-male tradition.

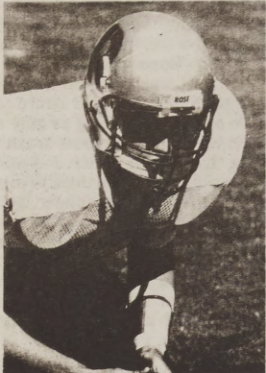
Co-Education will go into effect in 1995.

Further information in next issue.

Sports

Brian Schwager is always in the middle of the action

In his boyhood dreams, Rose-Hulman middle linebacker Brian Schwager wanted to play at a Big Ten college — tackling running backs from USC, UCLA or Washington in front of roaring



Brian Schwager

crowds at the Rose Bowl.

"But I got to 5-foot-10 and stopped growing," he says with a chuckle.

Schwager may be small, and he's not that quick, but he sure makes up for it in determination, fortitude and something the senior mechanical engineering major refers to as "heart."

"I have a sense of the position. I feel I can get to the ball at all times. I love that feeling," he said.

That brings the Pewaukee, Wis., native face-to-face with opposing running backs, quarterbacks and receivers. So far, he's been up to the test, leading the Engineers in tackles (24) this season.

Schwager professes that his best game is yet to come. Like, maybe, this Saturday when the Engineers (1-2) open Indiana Collegiate Athletic Conference play at home against DePauw Univer-

sity (1-2). The Tigers are the defending league champs and the only Indiana team to defeat Rose-Hulman in the last two seasons.

We'd all like to play well against DePauw. Maybe that's been our problem so far this season. We're always looking forward to this week," says Schwager, the Engineers' defensive co-captain. "This game has become a big rivalry for us. We'll be ready on Saturday, and I know they'll be ready. It should be a great football game between two good teams. Nobody should go away disappointed: the players or the fans."

So, in effect, Saturday's game could be Schwager's "Rose Bowl."

"I've never been associated with a rivalry as intense as this game. Coach (Scott Duncan) won't have to give us much of a pep talk. Also, it's homecoming, we'll have a big crowd and,

hopefully, the weather will be nice. We'll be ready to play. I'm getting psyched up just thinking about the game," he said.

Schwager had a career-high 12 tackles and two quarterback sacks in last year's homecoming game, a 30-25 victory over Franklin College. That was good enough to earn him the ICAC's Defensive Player of the Week honor.

However, the 1991 season and its 1-2 record has brought a mixture of emotions: frustration, jubilation and concern.

"It's been a Jekyll and Hyde type of season. We played so well against Drake University (a 31-21 win) and then so poorly against Illinois Benedictine College (a 26-16 loss)," Schwager said. "It's frustrating because I know we've definitely got the talent to beat any team on our schedule. We can win this conference. Now, we've got to go out and do it."

Off the field, Schwager is a

dean's list student, maintaining a lofty 3.1 grade point average at one of the nation's most demanding engineering colleges. Also, he was an all-conference baseball player last spring, leading Rose-Hulman in home runs (3) and runs batted in (32) while having a .344 batting average. That average was 127 points higher than his average in 1990.

"I had a good junior season: in the classroom, on the football field and, especially, in baseball," says Schwager, who played left field and catcher in baseball. "Having Kevin Klumper (1991 College Academic All-American Baseball Player of the Year and ICAC Player of the Year) and Britt Petty (All-ICAC basketball player) as roommates helped set my priorities. I'm more focused on what's important in my life: my classes, athletics and friendships with fellow players. That's what makes small college athletics so great."

Rose-Hulman Fall Sports Schedule

SATURDAY, OCTOBER 5

FOOTBALL, DePauw University, Phil Brown Field, 1:30 p.m. (ICAC)
CROSS COUNTRY, Vincennes University, Rose-Hulman Course, 11 a.m.

MONDAY, OCTOBER 7

JV FOOTBALL, at Wabash College, Crawfordsville, 3:30 p.m.

THURSDAY, OCTOBER 10

SOCCER, at St. Joseph's College, Rensselaer, 4 p.m.

SATURDAY, OCTOBER 12

FOOTBALL, at Franklin College, Franklin, 1:30 p.m. (ICAC)
SOCCER, Fontbonne College, Jim Rendel Field, 1 p.m.
CROSS COUNTRY, at Washington University, St. Louis, Mo., 11 a.m.

TUESDAY, OCTOBER 15

BASKETBALL, Start of Practice, Shook Fieldhouse, 5 p.m.

FRIDAY, OCTOBER 18

CROSS COUNTRY, at Indiana Intercollegiate Meet, Bloomington, 4 p.m.

SATURDAY, OCTOBER 19

FOOTBALL, at Hanover College, Hanover, 1:30 p.m. (ICAC)
SOCCER, at Denison University, Granville, Ohio, 11 a.m.

THURSDAY, OCTOBER 24

SOCCER, at Wabash College, Crawfordsville, 3 p.m. (ICAC)

SATURDAY, OCTOBER 26

FOOTBALL, Wabash College, Phil Brown Field, 1:30 p.m. (ICAC)
CROSS COUNTRY, at ICAC Championships, Anderson, 11 a.m.
SOCCER, at DePauw University, Greencastle, 11 a.m. (ICAC)

SATURDAY, NOVEMBER 2

FOOTBALL, Anderson College, Phil Brown Field, 1:30 p.m. (ICAC)
SOCCER, Franklin College, Jim Rendel Field, 11 a.m. (ICAC)

WEDNESDAY, NOVEMBER 6

CROSS COUNTRY, Wabash College, Rose-Hulman Course, 4:30 p.m.

SATURDAY, NOVEMBER 9

FOOTBALL, at Taylor University, Upland, 1:30 p.m. (ICAC)

MONDAY, NOVEMBER 11

BASKETBALL EXHIBITION, Australian Exchange, Shook Fieldhouse, 7:30 p.m.

SATURDAY, NOVEMBER 16

FOOTBALL, Manchester College, Phil Brown Field, 1:30 p.m. (ICAC)
CROSS COUNTRY, NCAA Great Lakes Regional, Terre Haute, 11 a.m.



GOOD LUCK
ROSE SPORTS



1991 Fall Bowling Schedule

Sept. 21	Indiana State University	men & women
	Imperial Lanes	
Sept. 28	Eastern Illinois University	MEN ONLY
Oct. 5	Ball State University	men & women
Oct. 12	Purdue University	men & women
Oct. 26-27	Hoosier Classic at IU	
Nov. 2	University of Evansville	men & women
Nov. 9	Indiana University	MEN ONLY
Nov. 16	Vincennes University	men & women
Nov. 23	Sycamore Classic at ISU	

All UTL bowling will start
at 10 a.m. and 2 p.m.



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Sports

Rose may be playing for ICAC title in Homecoming / Conference opener

Coaches, players ready for DePauw

by Jim Broskow
Sports Reporter

Last year, in Rose-Hulman's conference opener against DePauw University, the Engineers didn't know it, but they were playing for the conference title. DePauw finished 1990 undefeated in the ICAC, while the matchup gave Rose its only conference loss.

The football team is reverting back to basics to prepare for the ICAC opener against the DePauw Tigers on Saturday. The Engineer's homecoming crowd, which is expected to be the largest ever, should provide plenty of motivation. As coach Duncan explains, "We need to gain confidence in fundamentals by using them in practice; we need to learn to concentrate better on game day by concentrating better in practice." Duncan added, "we need to be excited and enthusiastic on game day by getting excited and enthusiastic in practice."

The Engineers last outing proved painful both physically and mentally. Rose fell to Illinois Benedictine 26-16 while suffering many injuries, including a game-ending shoulder injury to starting quarterback Todd Foreman early in the game.

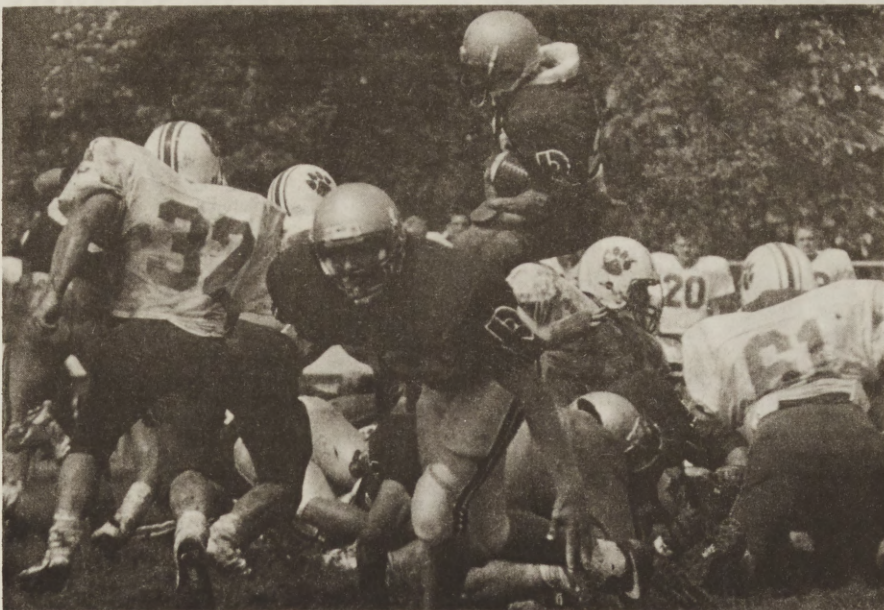
The significance of tomorrow's game, however, is deep. Rose faced the Tigers last year in the same position as they are in

now. It ended up the Engineer's last loss of the season, and their sole conference loss, which cost them the conference title. DePauw's 30-10 victory was the first of a rare seven straight ICAC wins.

This year, DePauw will be bringing a similar 1-2 record to Phil Brown Field. The Tigers are strong defensively, with several outstanding players, including inside linebackers Matt Nelson and Jim Perry. Offensively, their strength is difficult to gauge. They have been struggling with the ball, but they have played only perennial defensive powerhouses this year. Runningback Terry Dickey is a strong point in their offense. Duncan praised their program and its tradition: "They're well coached."

Fortunately, Rose has had an extra week to recover and prepare. Foreman will be back in action. Running backs Kevin Greene and Shannon Gatke, on injured reserve the entire season so far, may see action tomorrow. On the upside, tailback Mark Guerrettaz has been averaging over 100 yards per game, linebacker Brian Schwager has made 25 tackles so far, and defensive back Ken Brech made his second interception of the season.

On what the team needs to work on for tomorrow, Duncan men-



Senior tight end Craig Laker looks for a block, as tailback Mark Guerrettaz takes the ball over the top. Both players hope to lead Rose to a homecoming victory over DePauw tomorrow at 1:30 p.m.

tioned, "we need to do a better job of executing and concentrating on game day." He said enthusiasm is up, and he is stressing game-day intensity. "We need to play like it is the conference championship...."

Tomorrow's big game is scheduled for 1:30 p.m., so come out and cheer the Engineers on to victory.

Soccer loses to ranked MacMurray amidst great season

by Tommy Baker
Sports Reporter

Can you believe the turn-around of the Rose Soccer Team from last year? Last year at this time Rose had a record of 2-9-1 and had been outscored 8-31. Five of the Engineer's losses had been through shutouts by the opposing team. But that was then...

The Engineers now claim a 4-3 record and have outscored their opponents 15-10. What could be better than a winning record? How about the fact that the Engineers have yet to be scored on in the I.C.A.C. and hold an impressive 1st place standing. The Engineers have beat the likes of

Manchester College (7-0), Hanover College (3-0), and Anderson University (1-0) in order to command a 3-0 record in conference play.

The Engineers were on a four game winning streak headed into last Saturday's game against MacMurray College. MacMurray ended the Engineers' streak. In a saddening match the Engineers failed to hand MacMurray their first loss. As the final whistle sounded, it was MacMurray 5, Rose 0.

Asked how he felt about the game, Coach Ruark commented that his team played poorly except for a 30 minute stretch in the

second half. Coach Ruark thought his team might have felt intimidated playing the nationally 6th ranked N.C.A.A. team. However, Coach Ruark expressed that the Engineers needed a game like this to show him where the team stands. MacMurray has beaten such powerhouse teams as Wheaton College and Washington University to attain their 10-0 record.

Will the Engineers bounce back after such a defeat? By print time the Engineers will have played I.C.A.C. foe Taylor University in hopes of avenging last year's 2-1 defeat. This is Taylor's last year in the I.C.A.C. and consequently their last year that Rose will play them.

Rose harriers keep running in stride

by Greg Dixon
Sports Reporter

"G'job guys!" shouted team manager Dave Troike as the cross country team engineered a thundering charge across the challenging Beloit Invitational course. Troike, the team's faithful cameraman and assistant witnessed Rose-Hulman's fourth place finish in a bustling field of fifteen teams.

The race course, publicized as an "Old English Style Course" abounded with creeks to cross, railroad ties stacked as hurdles, and bales of hay to overcome. Senior Steve Lawrence described the course as "good, clean, muddy fun."

Lawrence may be considered the team expert on such a topic as he crashed while crossing a creek not once, but twice. Also, added Lawrence, "maybe I should have

been a civil after playing in that much mud." (Editor's Note: the correct term is "soil.")

Once again, the Dixon duo, senior Greg and freshman Lee, led the team with 8th and 20th place finishes, respectively. Additionally, junior Mark Stremler posted an impressive career best time of 27:46 to claim 30th place. Stremler's finish was a relief to all Engineer cross country fans as some had questioned his fitness after a slow start this season. When freshman teammate Matt Likes was asked what he thought of Mark's performance, he was heard to say "I likes it."

Next Saturday morning, the Engineers will host Vincennes University in a Homecoming dual meet. The Engineers anticipate a good performance and encourage the student body to come and yell as they run by.

Beloit Invite Results
(5 Miles)

Place		Time
8	Greg Dixon (A)	26:47
20	Lee Dixon (A)	27:28
30	Mark Stremler (A)	27:46
34	Brett Mazary (A)	27:56
35	Rick VanMeter (A)	27:59
41	Steve Lawrence (A)	28:20
48	Jason Hoffman (B)	28:31
52	Brady Nvekam (A)	28:48
67	Bill White (B)	29:15
72	Matt Likes (B)	29:19
82	Erick Breneman (B)	29:56
95	Marty Malberg (B)	30:26

Top Five Teams
(of 24)

1	Grinnell	33
2	Wheaton	67
3	Monmouth	81
4	Rose-Hulman (A)	127
5	North Central	188
11	Rose-Hulman (B)	364

Bowling Club faces tough competition

by Eric Geib
Sports Reporter

The Rose-Hulman Bowling Club continued play this past weekend in the Indiana Illinois Conference Travel League, going two and six at Eastern Illinois University.

The morning shift was tough as junior Eric Geib rolled a 196 in game one and graduate student Rob Harmon shot a 191 in game two. Junior GJ Madlambayan had a 198 in game three

and also led the team in average with 186. The team won the middle game from Eastern Illinois, losing the first and third as well as total pins.

The afternoon shift pitted the Fighting Engineers against the Boilermakers of Purdue. Harmon led off game one with a 219 as Purdue turned it on in the tenth frame to overcome the lead Rose held through the game. Geib shot a 196 and Madlambayan added a 193 in game two as the Engineers won by 37

pins. Freshman Alan Sundheimer came alive in game three with a 219, but even with Madlambayan's 194, it was not enough as Purdue cruised to a 130 pin victory.

The Engineers are hopeful this year as they rebuild the team with the help of Sundheimer and other freshmen. During the Homecoming weekend, the team will travel to Ball State University. See a complete schedule on the previous page.

Sport Shorts at Rose...

The Rose-Hulman Ultimate Team (aka Chauncy's Chuckers) took to the field for the first time this year last Saturday at Deercreek music center. Their opponents included teams from IU, Earlham, and Rockford, IL.

While the Chuckers went winless at the tournament, it should be noted that this was an Open division tournament, which means that the Rose and Illinois State were the only

purely college teams at this tournament. All of the other college teams had alumni playing with them.

This tournament was won by Windy City, a Chicago club team, with second place going to Bedrock, the Indy club team.

The Chuckers had a great time playing and are looking forward to their next tournament on Oct. 26 at Ball State.

...and across the nation

Buffalo, N.Y. (CPS) — Competition, camaraderie and cultural exchange will be the order of the day when more than 6,000 scholar-athletes from 120 countries gather for the World University Games in 1993.

The 70-year-old competition, held every other year, is sched-

uled July 8-18, 1993, in Buffalo, N.Y. The games committee signed an agreement with CBS Sports to televise the games nationwide for 10 hours over two weekends.

Officials say the games will offer scholarships to qualified participants.

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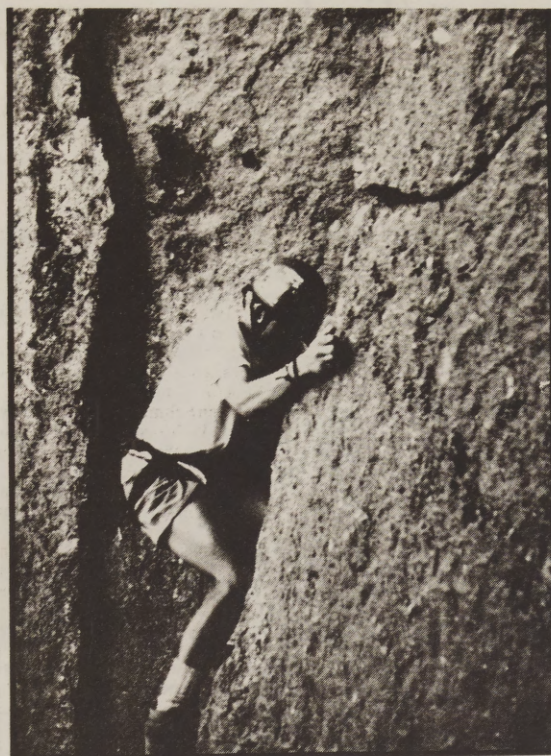
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Campus News



A Whitman College student climbs a rock face during freshman orientation. (Whitman College, 1991 File Photo)

Freshman orientation programs take students to new heights

by Will Mathies
Staff Reporter

Nationally, freshman orientation has become a very hot topic. Many universities have developed special programs for their new students. The goal for these programs is to prepare incoming freshmen to deal with topics varying from drugs, alcohol, and AIDS to living with roommates and study skills.

The freshman orientation week at Rose-Hulman tries to achieve this goal before school starts, but uses the freshman orientation class and Sophomore Advisor program to assist the freshmen during the school year. Rose is limited in the amount of activities it can provide (such as New Games) by the sheer number of tests that must be made available to the freshmen. While not all of the freshmen take all of the tests, everyone must be given an opportunity.

The required freshman orientation course has experienced a few changes in the last three years. Freshman

orientation has always been a required class, but it was more a series of lectures than a class. That changed in the fall quarter of 1989, when the Student Affairs office decided that a more structured program was needed.

One of the main goals was to provide Rose students with study skills. Many students who were forced to leave Rose blamed poor study skills as the main cause of their poor grades. While these students were generally able to achieve A grades in High School without effort, they were unequipped to deal with classes at Rose.

The first revision of the class required a book and met twice a week. However, according to class evaluations the students wanted some course credit for attending. The next year, a new and more straightforward book was selected and the class became a two credit course. In order to do this the Student Affairs office felt that some real work should be required, but then the students complained that this made the

class too hard.

This fall, the present freshmen are enrolled in a new version that is somewhat of a compromise. While it is only worth one credit, it only meets once a week and does not require a book. Preliminary evaluations seem to show that this mixture will work the best.

An important asset to freshmen that is unique to Rose-Hulman is the Sophomore Advisor program. The Sophomore Advisors are trained to help students deal with adjusting to college by assisting their Resident Assistants. One of the first duties of an RA or SA is to help move the freshmen into their Residence Halls. By providing this service, the staff helps to ease the apprehensions of the student and his family. This kind of individual attention is possible only at a school like Rose and is unheard of at larger colleges.

In addition to the programs already mentioned, the traditional Homecoming Bonfire has been an excellent way to unite the freshman class.

Entrepreneur-in-residence program yields cardiac arrest sensor

by Chad Ziglar
Staff Reporter

The recent work of students, faculty and a local doctor involved in the entrepreneur-in-residence (EIR) program at Rose Hulman may soon put a previously unknown curriculum in the spotlight.

Established in 1983, the major purpose of the EIR program is to join businessmen who have innovative ideas with students and faculty that have the technical know-how to develop these ideas into marketable products.

The program provides these entrepreneurs with laboratory facilities and the expertise of the faculty so that their ideas can be tested. At the same time, upperclassmen who participate in the program can utilize their problem-solving skills to deal with realistic engineering situations while getting paid for doing so.

Primarily financed by Rose Hulman, the EIR program also receives donations from outside sources depending on the specific project with which is being dealt.

Recently, the program has brought together a local doctor with a revolutionary idea and a team of faculty and students to develop a medical instrument that could change the lives of many who suffer from heart attacks.

Dr. Shun Lim, a Terre Haute cardiologist, received a patent for a sensor used to monitor lactic acid levels in the blood of patients. Lactic acid is produced by the heart after the oxygen level decreases during a heart attack.

In an article printed in the November 2, 1990 edition of the *Rose Thorn*, Lim stated that the project could not have progressed without the help of Rose Hulman, and that "the demands of my practice and the engineering implications of the device prevent me from doing such time consuming research."

Although partially funded by Rose-Hulman, the project has also received funds from the American Heart Association. Recently, Research Corporation Technologies, a non-profit organization that helps in-

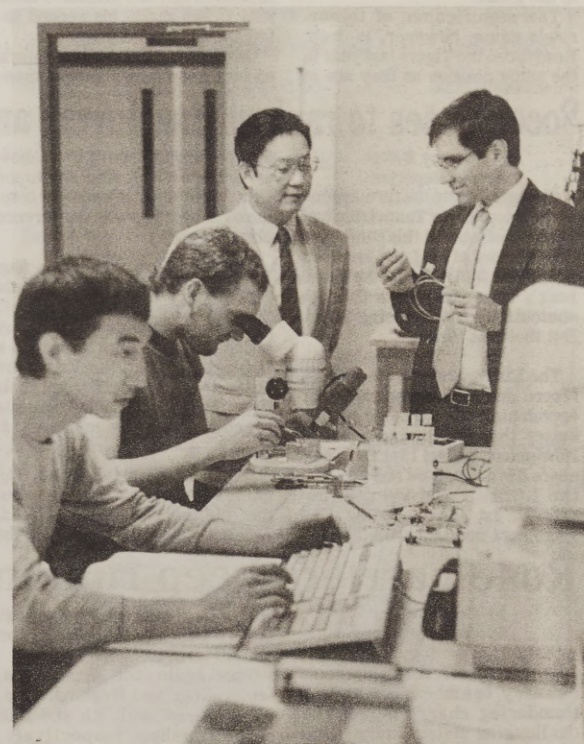
ventors find a corporation to produce a new invention, has shown interest in the sensor by giving a small monetary donation to the project.

Lee R. Waite, assistant professor of mechanical and biomedical engineering, has coordinated the project, which has involved four departments at Rose.

The new sensor, according to Waite, is an electrode at the end of a catheter surrounded by a multi-layer membrane. An enzyme located between the membranes reacts with the lactic acid, creating an electrical current. The current is then interpreted by a computer, which displays the lactic acid level.

Lim said the advantage of having this type of sensor is that it will greatly improve the chances of saving a heart attack victim's life.

Waite added that the ultimate goal of the project is to improve health care through the enhanced diagnosis of the severity of a heart attack; this would give doctors a head start in the treatment of heart patients.



Graduate student Da Yao and exchange student Carsten Spieker assist Professor Waite in E-I-R program.

Placement office holds career readiness seminar

by Joseph Batt
Staff Reporter

Approximately 200 job hunting seniors attended the seventh annual Senior Career Readiness Seminar. Topics of the seminar included the economy, which was a very serious issue discussed by the participants, what the recruiters are looking for, and what to expect in an interview.

Mr. Bill Sisson judged this year's seminar to be very successful based on three points.

First, the quality of the panelists was very good. There were representatives from a utility, government agencies, and four corporations: an electrical company, a steel manufacturer, a pharmaceutical company, and a plastics company.

The second factor in the success of the seminar, according to Sisson, was the attendance. Over 200 students attended the activity.

The third factor was the quality of the questions asked by the attendants. Sisson re-

served questions from previous years to start the discussion for the panel. Sisson said that this year he only used two or three questions, and was very pleased with the response of the students in jumping in and getting involved with the panel discussion.

The panel pointed out that next year will be another very tight year for the job market, and graduates must be aggressive to get a job. They said that science and engineering are still the best degrees to hold to get a good job. Rose-Hulman has a 93 percent placement for the class of 1991, and the number increases every week. Many schools only have placement of 40 to 60 percent.

For the students who plan to attend graduate school there was a graduate school seminar earlier this year. Topics discussed were application procedures, the importance of graduate school, and what is expected of graduate students.

Rose-Hulman is one of the very few schools that offers seminars like the graduate

school seminar and invites other schools. After the panel discussion in the morning there was a "college fair" in the auditorium. Each school then interviewed about 30 students each.

About 175 students were in attendance. Last year's graduating class had 64 students go on to a full time graduate school. About 80 percent of last year's graduates are attending graduate school of some type. Many of these are corporate sponsored.

The placement office recommends that students start looking for full time jobs at the beginning of their junior year. The placement office is trying to recognize students who are not aggressive enough and have communication difficulties during interviews, and help them with special assistance.

Part time job opportunities are continuously posted in the mail room and in the placement office as they become available.

(Continued from Pg. 1)

ing from Rose-Hulman in 1975. He has been involved in corporate research and development, direct marketing, and technical services.

His volunteer efforts for Rose-Hulman include eight years as an alumni class agent and two years as a RoseTech club officer.

The four will receive their awards at an alumni brunch at 9 a.m., Oct. 5 in the Hulman Union.



Jack Flotz



Dennis Fritz



Arthur Nelson

Homecoming

University alumni keep affordable education alive

(CPS) — They might be gone, but they certainly are not forgotten.

Alumni, in fact, are on the minds of college and university administrators even more often these days, playing increasingly large role in keeping affordable education alive and well during times of financial difficulty.

"They are absolutely essential. That's the backbone of it all," says Charlotte Heartt, director of development at Smith College in Northampton, Mass.

Statistics agree. The 1991 Voluntary Support of Education survey published by the Council for Aid to Education showed that U.S. colleges snagged \$9.8 billion dollars in contributions during the 1990 academic year, the highest amount ever.

Alumni contributions accounted for 26 percent of that total — an estimated \$2.5 billion. Corporations, foundations, religious organizations and other individuals donated the rest.

"As colleges are feeling more financial pressure, they are going to try to get more money" from voluntary sources, says David Morgan of Council for Aid to Education's Alumni Services. "By and large, voluntary support has grown steadily over the past 30 years."

Most colleges and universities have noticed the trend, scoring record-breaking Capital Campaigns for donations and developing new, innovative alumni programs in which people can donate both money and services.

"We've seen a dramatic increase in the number of volun-

teers," says Richard Tantillo, director of development at Rensselaer Polytechnic Institute in Troy, N.Y. "If alumni are involved in another way first it makes them more passionate when they get to fundraising."

Volunteer services offered by alumni at various schools include recruiting, serving on legislative committees to lobby state governments, serving on college steering committees and other boards and working with career development networks for recent graduates of their alma maters.

Stanford University, which is

"If alumni are involved in another way first, it makes them more passionate when they get to fundraising."

second in the nation in both corporate and other voluntary gift-receiving, relies heavily on volunteerism as well.

Stanford has almost ended its centennial Capital Campaign, which has raised \$1.2 billion so far, surpassing its goal of \$1.1 billion by February, 1992.

"We saw the creation of a volunteer (alumni) network in which we will have made face-to-face contact with about 10,000 alumni (for donations) by February. That requires a huge volunteer structure," says Elizabeth Sloan, director of communications in Stanford's development office.

"We have a more committed group of alumni than we've ever had before."

Of the \$1.2 billion total, about \$760 million came from alumni contributions. To date, Stanford's five-year campaign is the largest in the nation's history. But, both Harvard University and Cornell University have recently launched campaigns with loftier goals.

Heartt says Smith College, an all-women's school, just completed its won record-breaking year, raising \$163 million, the most achieved by a liberal arts college nationwide.

"Alumnae represent 70 percent of our giving," she says. "Their commitment encourages other to give."

The council for Aid to Education named the University of Iowa as its top alumni association in the country in 1990 — the focus there has primarily been on volunteerism. An example — alumni who are active in adult illiteracy programs.

"Adult illiteracy is a nationwide program," says Rich Emerson, director of Iowa's alumni association. "We have alumni tutors helping those who border on illiteracy."

Another example of unique alumni volunteer involvement occurs every year at one of the nation's smallest, accredited co-educational colleges.

At Sterling College in Craftsbury Common, Vt., alumni return each year for an alumni work weekend. Activities in the past have included building a solar-powered barn, building a new library, putting up fences and

building drainage ditches.

"We get a lot of donated labor, some of it is fairly skilled," says Sarabelle Hitchner, vice president for college relations.

Hitchner says last year about 100 alumni returned — that's a sizable turnout considering the school only admits about 80 people for each class during the regular school year.

At Edinboro University of Pennsylvania, one of the focuses of fundraising is current students.

"The money we raise will be tangibly beneficial for endowed scholarships and grants for exceptional students," says Colleen Holmes, director of the alumni association. "Universities aren't the only ones hurting. We decided it's more important than ever to provide scholarships to continue to attract top students."

Ann Riddle, director of annual support at the University of Dayton agrees and says students understand that alumni are directly responsible for holding down the cost of tuition even when other financial problems are causing increases.

"People do realize that alumni support them and that their tuition would be a hell of a lot higher without them," she says.

Tuition is a sticky point at many colleges these days because of increases, and one school has decided to turn back the hands of time to revitalize its alumnae and benefit its students at the same time.

To celebrate its upcoming centennial in 1993, Hood College in Frederick, Md., is awarding 10 scholarships to students who had

a relative graduate from the school, allowing them to pay tuition equal to what their relative paid.

So, if a current sophomore has a grandmother who was a sophomore in 1932, she would pay what her grandmother paid for tuition in 1932 — \$250.

The scholarship is more valuable the older the alumnae are — current tuition at the private women's college is \$12,078.

"We want to attract new students and make our alumnae think of Hood College again," says Don Schmaker, Hood spokesman. "We're hoping that something like this will increase our donations as well."

And as Homecoming celebrations begin at schools across the nation, many administrators have hope that "a lot of alumni will come back," Tantillo says. "It energizes them when they see the current students."

1990 Alumni Giving

Alumni accounted for \$2.5 billion given to universities. The amounts include contributions from alumni, non-alumni, religious organizations and foundation gifts, but exclude corporate gifts.

Here's a list of the schools that received the most voluntary support and their total contributions, according to the Council for Aid to Education: Harvard, \$213 million; Stanford, \$202 million; Cornell, \$161 million; University of Pennsylvania, \$140 million; Yale, \$130 million.

1991 Homecoming Queen Finalists

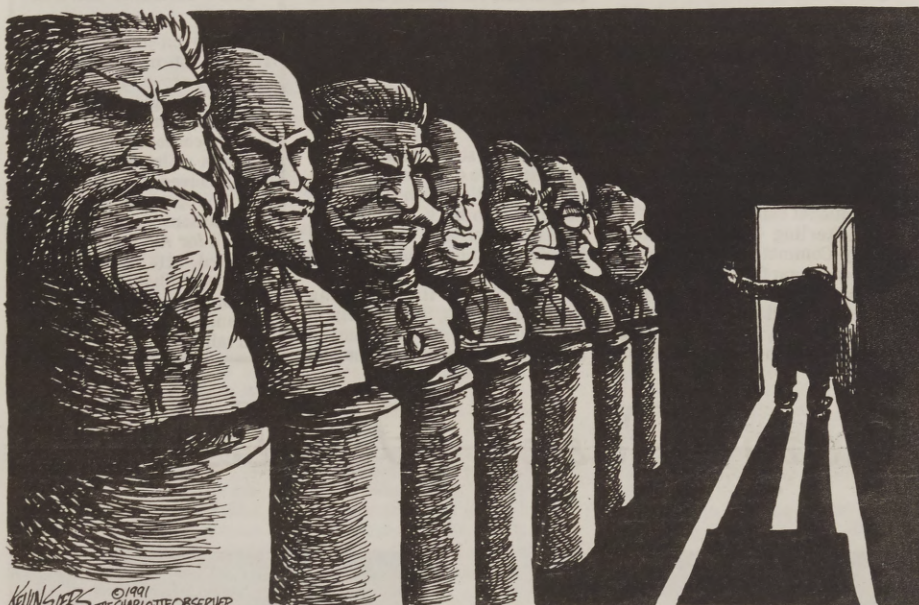


Comics



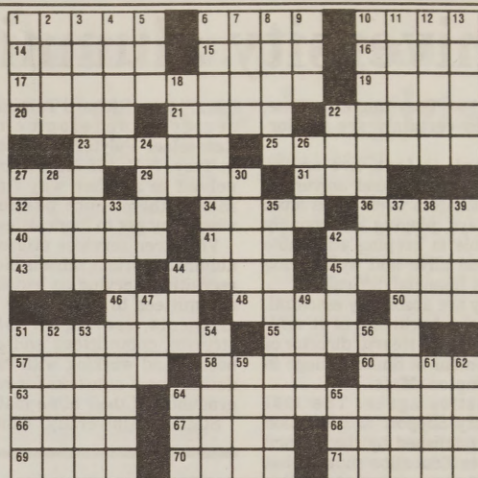
Recent attempts at keeping students from walking on the grass have been taken to an extreme. It is rumored that the grass is being kept in a vault in the business office.

photo by: Brian Dougherty



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TURN OFF THE LIGHT, THE PARTY'S OVER



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ACROSS

- 1 Scot. landowner
- 6 Labyrinth
- 10 Part of TLC
- 14 Year: Fr.
- 15 Caesar's wife?
- 16 Baltic feeder
- 17 Relative of an accordion
- 19 — contendere
- 20 Gordian —
- 21 Facility
- 22 Pungent
- 23 Desire wrongfully
- 25 Time of peace
- 27 Offering by Wordsworth
- 29 Prepare for printing
- 31 Remote
- 32 Ninny
- 34 Evict
- 36 Press down
- 40 Interior layout
- 41 Vane letters
- 42 Lid
- 43 Carbine
- 44 A — apple
- 45 In reserve
- 46 Moon jumper
- 48 Move
- 50 Roman bronze
- 51 — and a day
- 55 Make into law
- 57 Soprano Lucine
- 58 Search for game
- 60 — da capo
- 63 Diplomat's forte
- 64 Take aback
- 66 Biblical pronoun
- 67 Arrow poison
- 68 Art stand

- 69 Playground
- 70 Exploit
- 71 Western group

DOWN

- 1 Dearth
- 2 Soon
- 3 Naivete
- 4 Right-hand page
- 5 Poor grade
- 6 Physical changes
- 7 Spindle
- 8 Partitioned
- 9 Notable period
- 10 Orchestral music
- 11 Bedeck
- 12 Ignited again
- 13 Wear away
- 18 Oboe or clarinet
- 22 One — time
- 24 Swing violently
- 26 Salamander
- 27 Bettor's interest
- 28 Musical offering
- 30 Afr. city
- 33 Done together
- 35 Sent to jail
- 37 Earhart for one
- 38 Persian
- 39 Exec.
- 42 Actress Williams
- 44 Overwhelm
- 47 Eggs
- 49 Toward
- 51 Adipose
- 52 City on the Missouri
- 53 Indy participant
- 54 Lorelei's river
- 56 Chocolate tree
- 59 Plaintiff
- 61 Angers
- 62 Salt tree
- 64 Solved
- 65 Cotton fiber knot

ANSWERS

